

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P236623

Luminaire Tested: **VRVT4LED-LD5-24-DRF-UNV-L840-CD2-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P236623
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-367-12)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VRVT4LED-LD5-24-DRF-UNV-L840-CD2-WL-U
Description: METALUX VRVT4 LED LUMINAIRE
10 BOARDS WITH FROSTED ACYLIC LENS
Light Source: (560) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23455.0 lumens
Efficiency: N/A
Efficacy: 130.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.2 / 1.32
Luminous Opening: Rectangular w/ Sides (W: 1.04' x L: 4.12' x H: 0.25')
CIE Type: Direct

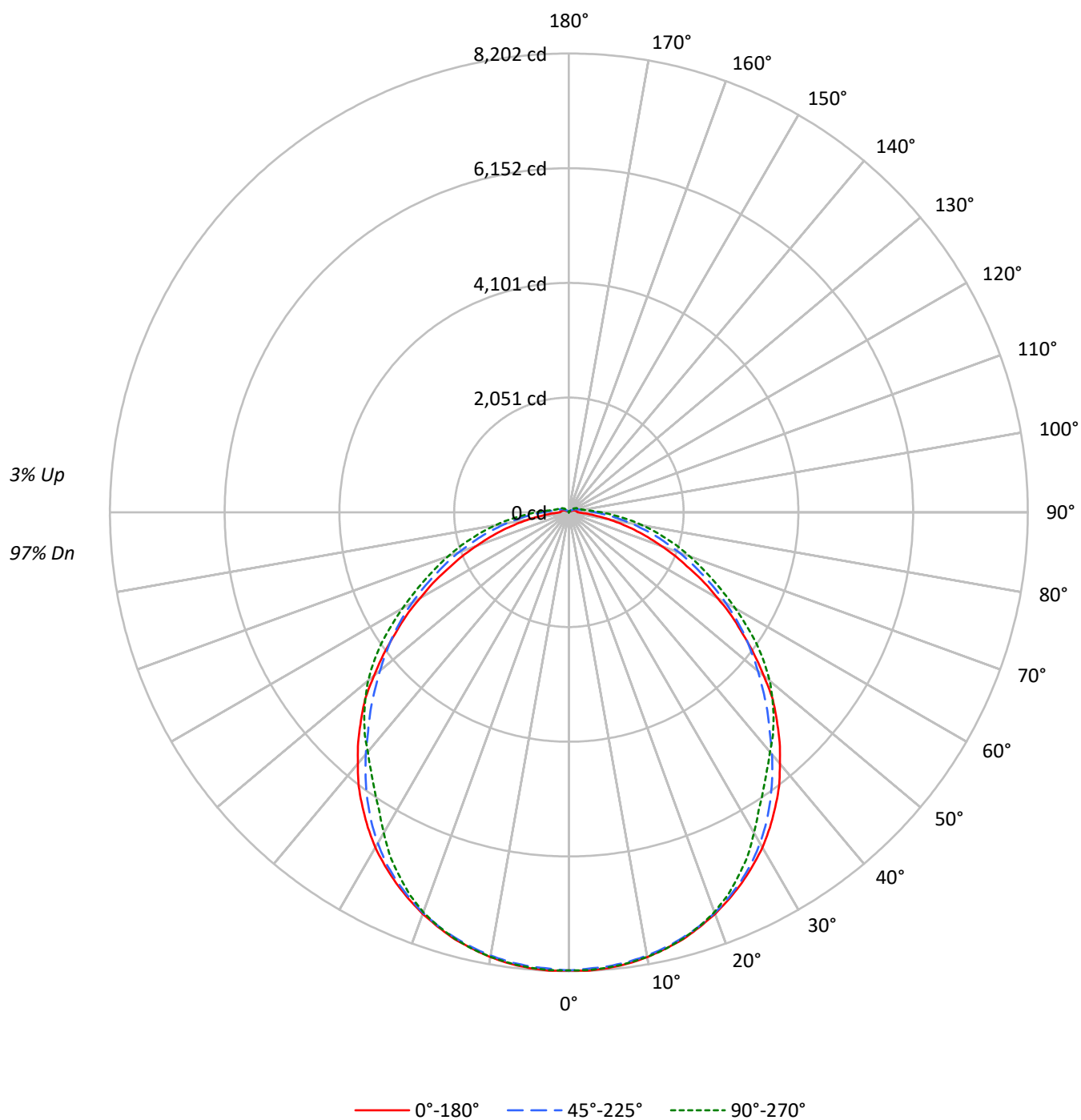
Input Watts (W): 179.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P236623

CATALOG NUMBER: VRVT4LED-LD5-24-DRF-UNV-L840-CD2-WL-U

Luminous Intensity Polar Plot





TEST NUMBER: P236623

CATALOG NUMBER: VRVT4LED-LD5-24-DRF-UNV-L840-CD2-WL-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	118	118	118	118	115	115	115	115		109	109	109		104	104	104		99	99	99
1	108	103	98	94	104	100	96	92		95	92	89		91	88	85		87	84	82
2	98	89	82	77	95	87	81	75		83	78	73		79	75	71		76	72	69
3	89	79	70	64	86	77	69	63		73	67	61		70	65	60		67	62	58
4	82	70	61	54	79	68	60	54		65	58	52		62	56	51		60	55	50
5	75	62	53	47	73	61	53	46		58	51	45		56	50	45		54	48	44
6	69	56	47	41	67	55	47	40		53	45	40		51	44	39		49	43	39
7	64	51	42	36	62	50	42	36		48	41	35		46	40	35		45	39	34
8	60	46	38	32	58	46	38	32		44	37	32		43	36	31		41	35	31
9	56	43	35	29	54	42	34	29		41	33	28		39	33	28		38	32	28
10	53	39	32	26	51	39	31	26		38	31	26		36	30	26		35	30	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20514	20514	20514
5°	20452	20106	20113
10°	20319	19728	19690
15°	20156	19313	19219
20°	19925	18850	18645
25°	19650	18293	17829
30°	19335	17597	16809
35°	18866	16714	15858
40°	18258	15669	15219
45°	17547	14658	14780
50°	16523	13707	14198
55°	15250	12846	13316
60°	13920	11839	12139
65°	12459	10729	11059
70°	11026	9682	10148
75°	9551	8592	9165
80°	7751	7365	8108
85°	5807	6210	6964



TEST NUMBER: P236623

CATALOG NUMBER: VRVT4LED-LD5-24-DRF-UNV-L840-CD2-WL-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	775.8	3.3
10°-20°	2224.1	9.5
20°-30°	3341.5	14.2
30°-40°	3917.6	16.7
40°-50°	3959.3	16.9
50°-60°	3486.0	14.9
60°-70°	2600.6	11.1
70°-80°	1634.3	7.0
80°-90°	770.9	3.3
90°-100°	324.7	1.4
100°-110°	188.8	0.8
110°-120°	121.1	0.5
120°-130°	67.9	0.3
130°-140°	30.5	0.1
140°-150°	8.6	0.0
150°-160°	1.8	0.0
160°-170°	1.2	0.0
170°-180°	0.5	0.0
0°-30°	6341.4	27.0
0°-40°	10259.0	43.7
0°-60°	17704.3	75.5
0°-90°	22710.0	96.8
90°-120°	634.5	2.7
90°-150°	741.5	3.2
90°-180°	745.0	3.2
0°-180°	23455.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8189	8189	8189	8189	8189	
5°	8176	8165	8144	8159	8166	777
15°	7898	7885	7871	7881	7887	2227
25°	7310	7303	7274	7223	7172	3368
35°	6431	6424	6279	6102	6057	4020
45°	5253	5222	5017	5094	5173	4047
55°	3794	3779	3834	4041	4094	3404
65°	2375	2416	2635	2797	2826	2374
75°	1210	1310	1592	1757	1795	1289
85°	342	480	741	887	907	361
90°	160	282	468	565	582	95
95°	145	211	312	362	367	117
105°	118	140	190	210	214	124
115°	72	79	131	157	166	72
125°	36	31	79	110	122	33
135°	18	14	33	62	72	14
145°	8	7	4	20	27	5
155°	6	6	4	1	0	3
165°	7	6	5	2	1	2
175°	7	7	5	3	2	1
180°	5	5	5	5	5	



TEST NUMBER: P236623

CATALOG NUMBER: VRVT4LED-LD5-24-DRF-UNV-L840-CD2-WL-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8189.2	8189.2	8189.2	8189.2	8189.2
2.5°	8202.2	8190.2	8164.2	8178.2	8191.2
5°	8176.2	8165.2	8144.2	8159.2	8166.2
7.5°	8136.2	8123.2	8106.2	8117.2	8127.2
10°	8073.2	8066.2	8046.2	8059.2	8068.2
12.5°	7988.2	7985.2	7967.2	7986.2	7992.2
15°	7898.2	7885.2	7871.2	7881.2	7887.2
17.5°	7772.2	7770.2	7757.2	7768.2	7758.2
20°	7639.2	7637.2	7618.2	7623.2	7605.2
22.5°	7480.2	7485.2	7456.2	7429.2	7409.2
25°	7310.2	7303.2	7274.2	7223.2	7172.2
27.5°	7121.2	7117.2	7071.2	6979.2	6922.2
30°	6918.2	6902.2	6830.2	6692.1	6616.1
32.5°	6683.1	6677.1	6568.1	6400.1	6313.1
35°	6431.1	6424.1	6279.1	6102.1	6057.1
37.5°	6171.1	6148.1	5969.1	5830.1	5813.1
40°	5867.1	5852.1	5646.1	5562.1	5591.1
42.5°	5575.1	5554.1	5311.1	5318.1	5396.1
45°	5253.1	5222.1	5017.1	5094.1	5173.1
47.5°	4939.1	4861.1	4703.1	4867.1	4935.1
50°	4546.1	4520.1	4408.1	4603.1	4685.1
52.5°	4179.1	4162.1	4115.1	4342.1	4396.1
55°	3794.1	3779.1	3834.1	4041.1	4094.1
57.5°	3451.1	3429.1	3538.1	3731.1	3756.1
60°	3070.1	3066.1	3233.1	3424.1	3430.1
62.5°	2736.1	2706.1	2933.1	3102.1	3118.1
65°	2375.1	2416.1	2635.1	2797.1	2826.1
67.5°	2074.0	2125.0	2361.1	2534.1	2550.1
70°	1756.0	1820.0	2094.0	2264.0	2299.1
72.5°	1481.0	1560.0	1818.0	2008.0	2048.0
75°	1210.0	1310.0	1592.0	1757.0	1795.0
77.5°	959.0	1078.0	1337.0	1533.0	1566.0
80°	722.0	847.0	1126.0	1300.0	1327.0
82.5°	514.0	646.0	912.0	1087.0	1121.0
85°	342.0	480.0	741.0	887.0	907.0
87.5°	221.0	359.0	588.0	710.0	727.0
90°	160.0	282.0	468.0	565.0	582.0
92.5°	151.0	238.0	377.0	449.0	450.0
95°	145.0	211.0	312.0	362.0	367.0
97.5°	141.0	192.0	266.0	299.0	301.0
100°	136.0	173.0	235.0	257.0	260.0
102.5°	128.0	155.0	208.0	232.0	233.0
105°	118.0	140.0	190.0	210.0	214.0
107.5°	107.0	124.0	172.0	194.0	199.0
110°	95.0	109.0	158.0	181.0	188.0



TEST NUMBER: P236623

CATALOG NUMBER: VRVT4LED-LD5-24-DRF-UNV-L840-CD2-WL-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	84.0	93.0	144.0	169.0	176.0
115°	72.0	79.0	131.0	157.0	166.0
117.5°	61.0	65.0	117.0	145.0	156.0
120°	52.0	52.0	104.0	134.0	144.0
122.5°	43.0	41.0	92.0	122.0	133.0
125°	36.0	31.0	79.0	110.0	122.0
127.5°	30.0	24.0	67.0	98.0	109.0
130°	26.0	20.0	54.0	86.0	97.0
132.5°	21.0	17.0	43.0	74.0	84.0
135°	18.0	14.0	33.0	62.0	72.0
137.5°	15.0	12.0	23.0	51.0	60.0
140°	12.0	10.0	15.0	41.0	48.0
142.5°	10.0	8.0	8.0	30.0	38.0
145°	8.0	7.0	4.0	20.0	27.0
147.5°	7.0	6.0	4.0	13.0	18.0
150°	6.0	5.0	4.0	5.0	10.0
152.5°	6.0	5.0	4.0	1.0	2.0
155°	6.0	6.0	4.0	1.0	0.0
157.5°	6.0	6.0	4.0	1.0	0.0
160°	6.0	6.0	4.0	2.0	0.0
162.5°	6.0	6.0	5.0	2.0	0.0
165°	7.0	6.0	5.0	2.0	1.0
167.5°	7.0	7.0	5.0	2.0	1.0
170°	7.0	7.0	5.0	3.0	1.0
172.5°	7.0	7.0	5.0	3.0	1.0
175°	7.0	7.0	5.0	3.0	2.0
177.5°	7.0	7.0	5.0	3.0	2.0
180°	5.0	5.0	5.0	5.0	5.0

(END OF REPORT)